

**4 INPUTS STANDALONE DUPLEX DIGITAL VIDEO
RECORDER WITH DISPLAY
ART. 80153**



Please read this manual thoroughly before use
and keep it for future reference.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION



Explanation of graphical symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to person.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

The user is obliged to inform himself and to conform himself to the national and local rules concerning the monitoring and the audio and video recording. Nobody else will consequently be held responsible for an improper use of this system which could break the laws in force.

FCC COMPLIANCE STATEMENT

FCC INFORMATION: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE IN A RESIDENTIAL INSTALLATION. THIS EQUIPMENT GENERATES, USE AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. HOWEVER, THERE IS NO GUARANTEE THAT INTERFERENCE WILL NOT OCCUR IN A PARTICULAR INSTALLATION. IF THIS EQUIPMENT DOES CAUSE HARMFUL INTERFERENCE TO RADIO OR TELEVISION RECEPTION, THE USER IS ENCOURAGED TO CORRECT THE INTERFERENCE TO OWN EXPENSES.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL DEVICE COMPLIES WITH CANADIAN RULES.

CE COMPLIANCE STATEMENT

WARNING:

THIS IS A CLASS A DIGITAL DEVICE. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE, IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

IMPORTANT SAFEGUARDS

1. READ AND KEEP THESE INSTRUCTIONS

Please read this manual thoroughly before use and keep it for future reference.

2. CLEANING

Unplug this equipment from the wall outlet before cleaning it. Use a mild household detergent, never use strong solvent. Clean the unit with a slightly damp soft cloth.

3. ATTACHMENTS

Never add any attachments and/or equipment without the approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

4. WATER AND/OR MOISTURE

Do not use this equipment near water or in contact with water.

5. ACCESSORIES

Do not place this equipment on an instable cart, stand or table. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer. This equipment and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the equipment and cart combination to overturn.

6. VENTILATION

If existing, the openings or ventilation grills of the device have been planned with the scope to supply ventilation to the apparatus, to assure a reliable operation of the same and to protect it from overheating. Do not block or cover these openings.

7. POWER SOURCES

This equipment should be operate only from the type of power source indicated on the marking label. If you are not sure of the type of power, please consult your equipment dealer or local power company. Warning if this equipment works with battery, risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the local law.

8. GROUNDING

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

9. POWER AND CONNECTION CABLES PROTECTION

Protect the cables from being walked on or pinched particularly at plugs and the point where they exit from the equipment.

10. LIGHTNING STORM

For added protection for this equipment during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the equipment due to lightning and power line surges.

11. OVERLOADING

Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

12. SERVICING

Do not attempt to repair this equipment yourself. The opening and the movement of the covers could you expose at high voltage or other dangers. Refer all servicing to qualified service personnel.

13. DAMAGE REQUIRING SERVICE

Unplug this equipment from the wall outlet and refer servicing to qualified personnel under the following conditions:

- a. If the power supply cord or the plug has been damaged.
- b. If liquid is spilled or objects have fallen into the equipment.
- c. If the equipment has been exposed to rain or water.
- d. If the equipment does not operate normally by following the operating instructions. Adjust only those controls that are covered by operating instructions. An improper adjustment of other controls may result in damage.
- e. If the equipment has been dropped or the case damaged.
- f. If the equipment exhibits a distinct change in performance.

14. REPLACEMENT PARTS

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

15. SAFETY CHECK

Upon completion of any service or repairs to this equipment, ask the service technician to perform safety checks to determine that the equipment is in proper operating condition.

16. INSTALLATION IN PUBLIC PLACES

This kind of installation would have to be made by specialized personnel and to be in compliance with the local laws.

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1. INTRODUCTION

Art. 80153 system provides total video security solution for 4-channel digital surveillance system supporting duplex (simultaneous playback and record) functionality.

Either front panel buttons or remote control unit or mouse can operate all DVR menu setting.

The functionality of each button both on remote control and front panel is exactly same.

2. PHYSICAL UNIT

2.1. Top Panel



2.1.1 Function Of The Top Panel

- 1) MENU/POWER → A) long press: turn on or turn off the LCD monitor.
B) short press: used for display menu/move the cursor left or right.
- 2) DOWN → move the cursor of the parameters on the screen sub menu downwards.
- 3) UP → move the cursor of the parameters on the screen sub menu upwards.
- 4) + → make the volume "+" or increase value.
- 5) — → make the volume "—" or reduce value.

2.1.2 Menu Interface

When you need to adjust the parameters for the LCD monitor, you can short press "Menu/Power". The menu will be display on the LCD screen. Then short press "Menu/Power" to move the cursor leftwards or rightwards to select the option that user want to modify. Press "UP" or "Down" to move the cursor upwards or downwards. Then, press "+" or "-" to increase value or reduce value. After finished the setting, press the "Menu/power" several times to confirm and exit.

PICTURE:



"BRIGHT": 0~100.

"CONTRAST": 0~100.

"COLOR": 0~100.

**AUDIO:**

“VOLUME”: 0~100.

**FUNCTION:**

Press the button “UP” or “DOWN” to change the display mode - “NORMAL & ZOOM” - of the LCD monitor.

“ZOOM”: 16:9; 4:3.

**SYSTEM:**

In this menu interface, users can choose the video format of display.

“S-ROLOC”: AUTO; NTSC; SECAM & PAL.

**PRESET:**

In this menu interface, users can close the screen automatically in two ways.

1) Sets for the time of dormancy. The screen will be closed automatically in stipulated time.

“SLEEP”: 0~240 minutes. The value is increased or decreased by ten.

The value of “sleep” indicates how long the LCD monitor will be turned off automatically if “OFF-TIME” is not set.

2) Sets for closedown time and time of starting the LCD monitor. The screen closes and reveals at corresponding time point.

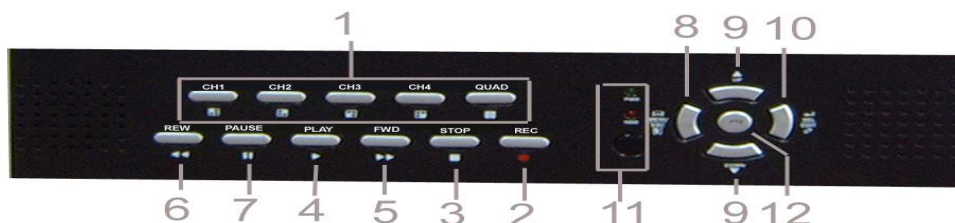
“TIME”: --: --, the current time of system.

“OFF-TIME”: --: --, the time of the screen turning off automatically.

“ON-TIME”: --: --, the time of the screen turning on automatically.

When modify “TIME; OFF-TIME; ON-TIME”, press “+” to adjust the value of minute and press “—” to adjust the value of hour.

2.2 Front Panel



A series of buttons on the DVR front panel make a system to operate its basic functions, such as recording, playback, fast-forward, reverse, etc. For more details about the DVR menu, refer to “[5. SETUP](#)”.

** The front key panel feature can vary but the functionality of each button is the same.

① Quad, CH1, CH2, CH3, CH4

Use this button for full screen display for each camera channel or quad display on the monitor screen. If you push “Quad” camera selection button, DVR will display all 4 channels (cameras) at the same time in quad screen.

② REC

Press “REC” button to start manual recording. Then you will see this mark ‘●’ on the selected channel of the screen, which means that the channel is now recording.

To stop manual recording, press “REC” again during recording mode.

③ STOP

To stop playback, press the “STOP” button.

④ PLAY

After recording, press “PLAY” button to start video playback.

Playback will start with the oldest unread video data and then continue playing.

⑤ FWD

This is the fast forward button. To play the recorded stream faster, press the “FWD” button.

There are three levels of fast forward playback speed.

(a) FF 1 (►►) : Play two times faster (x2) than the normal play.

(b) FF 2 (►►►) : Play three times faster (x3) than the normal play.

(c) FF 3 (►►►►) : Play four times faster (x4) than the normal play.

To change the fast forward playback speed level, press the “FWD” button again.

⑥ REW

This is the rewind button. To play the recorded stream backward, press the “REW” button.

[NOTE]: The fast forward and reverse playback speeds will vary depending on the frame rate and record quality settings, as well as the number of channels recorded.

⑦ PAUSE

To pause the video playback, press the “PAUSE” button. Then the video displaying will be stopped.

To continue playback, push the “PLAY” button.

⑧ MENU/ESC

It displays menu option or go back to the previous.

⑨ UP(▲) / DOWN(▼)

To change a menu field, use the “UP” or “DOWN” buttons.

⑩ SELECT/EDIT

Use this button to change values on main menu or sub menu setting.

⑪ LED Light

(a) GREEN: The DVR unit is powered up and running.

(b) RED: System is in Recording Mode or in Playback Mode.

(c) IR Remote Receiver

⑫ PTZ

Use this button to enter PTZ mode.

2.3 Rear Panel



① AUDIO OUT

Use “AUDIO OUT” port for speaker (mono) connecting, this port is audio output for playback too.

② AUDIO IN

Use “AUDIO IN” port for microphone connection. If signal audio input is from channel 1, there will be audio output in channel 1 view and quad view. If signal audio input is from channel 2, there won't be audio output until in channel 2.

③ VIDEO INPUT

Use this BNC port to connect cameras to DVR system. You might need BNC connector for each (CH1-CH4) camera connection.

④ VIDEO OUTPUT

Use this port to connect DVR to the monitor. There is one video output. You can also connect one monitor at the same time which will display the same video image on both monitor and LCD monitor. Also, you can use the video output port to connect VHS device for tape backup.

⑤ PS/2 MOUSE PORT

Use this port for PS/2 mouse connection. If you have USB port mouse, use USB - PS/2 adapter to connect with this port.

⑥ SENSOR / ALARM / RS485

Sensor input

You can use this sensor terminal block to install up to 4 motion sensors into DVR. If you add the motion sensor devices to your DVR, the video recording can be triggered by motion detection.

Alarm input

This is an alarm input terminal in case you need to attach an alarm device on the system.

RS485

The two ports are RS485 power line ports. To control high-speed dome only RS485 line is connected to DVR.

⑦ AC-DC POWER ADAPTER JACK

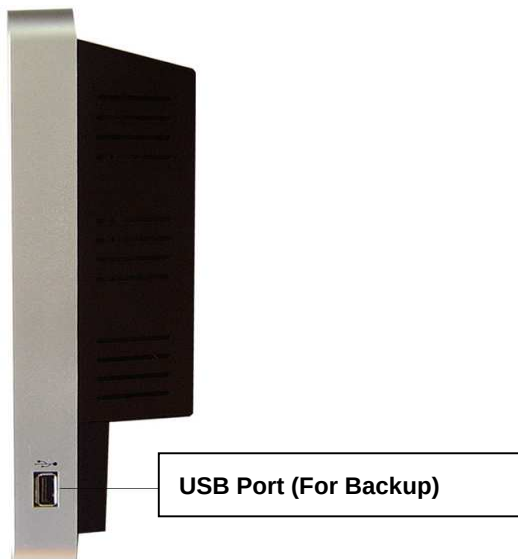
Connect the power adapter into DVR and plug the power cord into the wall.

Below is the information of input/output voltage for the power adapter.

[Input: AC 100-240V, 50/60Hz, 1.5A / Output: DC +12V == 3A]

⑧ THE POSITION OF INSTALLING HDD

2.4 Lateral Panel



2.5 Remote Control (optional)



1. CH1 ↑	Select or enlarge CH1 or Move dome up
2. CH2 ↓	Select or enlarge CH2 or Move dome down
3. CH3 ←	Select or enlarge CH3 or Move dome left
4. CH4 →	Select or enlarge CH4 or Move dome right
5. QUAD	Quad View
6. ◀◀ Z-	Rewind or Zoom-
7. ▶▶ F+	Play record list or Focus+
8. ▶▶ Z+	Forward or Zoom+ or Channel auto sequence switch
9. ●	Manual recording or Stop manual recording or Reduce value or Level scan
10. F-	Pause or Focus-
11. ■	Stop playing or Stop dome running
12. PTZ	PTZ Switch
13. Menu/ESC	Enter or exit setup menu
14. Select/Enter	Modify item or Increase value
15. UP	Move up the cursor
16. DOWN	Move down the cursor

3. GETTING STARTED

Install a hard disk drive into your DVR.

Connect cameras (up to 4) to DVR.

Connect other peripheral devices (mouse, USB Drive, external motion sensors or alarm) if necessary. PS/2 mouse must be connected to DVR before startup system.

Plug the power cord into the plug on the wall.

Start TV Monitoring and Recording.

- ☐ Make sure that a hard disk drive and camera(s) are properly installed.
- ☐ **The hard disk (IDE) jumper setting must be set to “MASTER “!**
- ☐ If the power is turned off while recording (i.e. a power failure), the DVR will enter “Power Recovery” mode at start up, detect that it has been shut down and then reinitiate the recording process.

4. HARDWARE SETUP

4.1 IDE Hard Disk Drive Installation

NOTE: Make sure that HDD jumper setting as “MASTER”



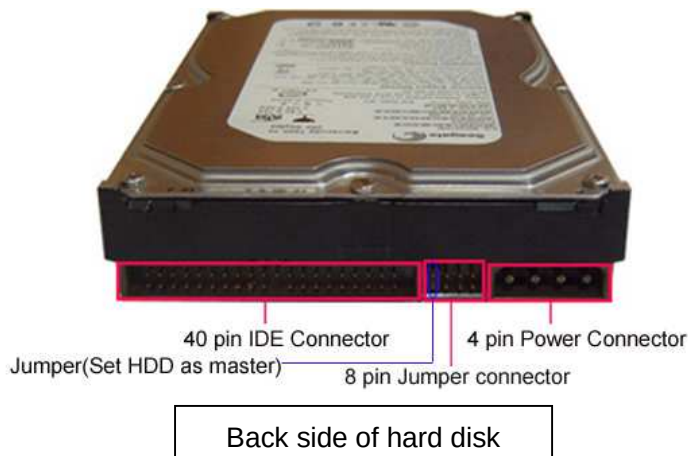
Before installing hard drive, set jumper as “MASTER”.

The master jumper setting varies depending on the hard drive manufactures.

Refer to manufacture's manual for master jumper setting.

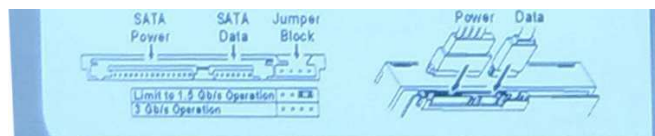
For example, this model of HDD is Seagate.

Connect the ribbon cable (IDE) cable & power cable



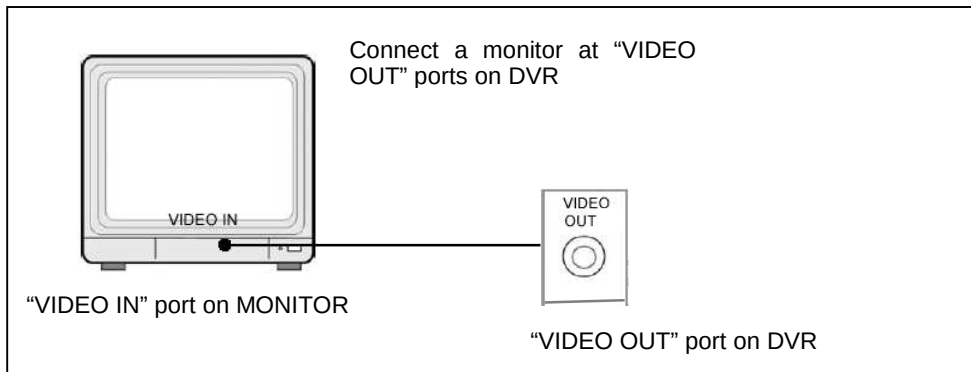
4.2 SATA Hard Drive Installation

Connect the cables as follows.



4.3 Monitor Connection

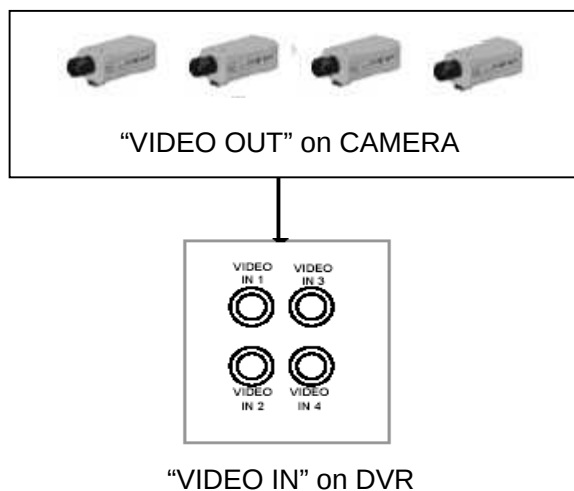
To display video image from cameras on the monitor, the DVR's video output signal should be transferred to your TV set or monitor.



Connect "VIDEO IN" of the monitor to "VIDEO OUT" of the DVR system.

4.4 Camera Connection

Connect between "VIDEO IN" of your DVR and "VIDEO OUT" of camera with video cable and plug in the camera's power adapter.



4.5 Sensor Connection

Our 4 CH DVR system can connect up to four sensors.

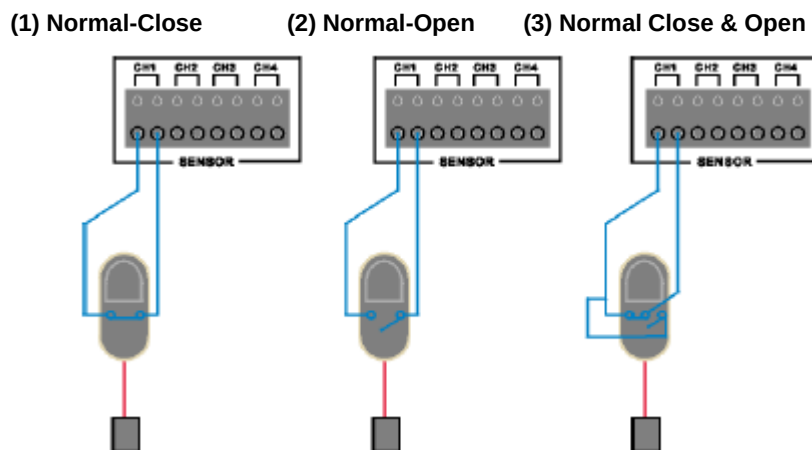
There are two steps for sensor installation.

- (a) Connect the sensor signal lines to the signal input terminal.
- (b) Connect the sensor power lines to the appropriate power source.

In general, there are three different types of sensors available in the home electrics store, where you can buy them. (1) Normal-Close. (2) Normal-Open. (3) Normal-Close & Open. Below is the brief diagram about how the each type of sensor is installed into DVR. The procedure for sensor install action is as shown below.

* After you install sensor(s), change the recording mode as "Sensor record" or "MD & Sensor record" on "RECORD SCHEDULE" in the DVR menu to enable sensor recording.

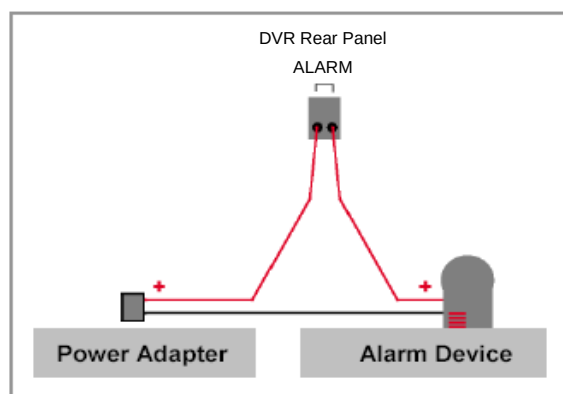
* Only the corresponding channel will record when a sensor trips, (e.g. sensor one corresponds with channel one).



4.6 Alarm Connection

The DVR has an internal switch for sounding alarm. The switch is normally open, but when the sensor is triggered, the alarm is activated as well. The circuitry is as follows.

First, connect the alarm power lines to the alarm switch terminal. Second, connect the alarm power lines to the appropriate power source.



4.7 Mouse Connection

Connect PS/2 mouse with the port below on the system, PS/2 mouse must be connected to DVR before startup system.



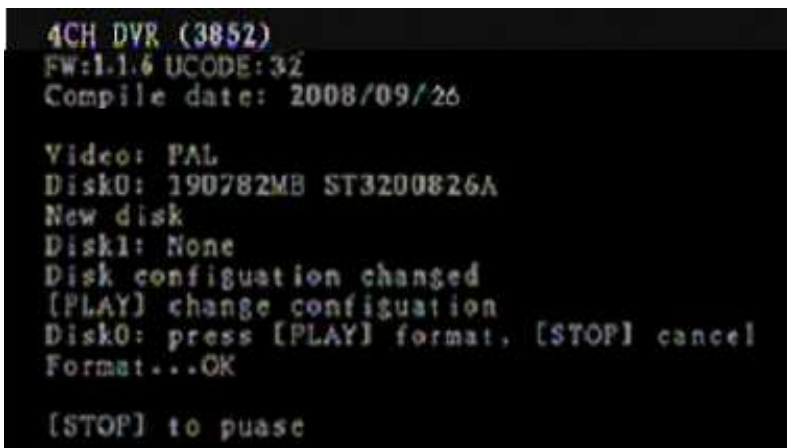
[PS/2 Mouse Port]

4.8 DVR Power Connection

Connect a DVR power adapter to the adapter jack at the rear panel of DVR unit.

Turn the power switch on. It will boot up the system.

If users install a new hard disk drive, it will ask for HDD formatting before a system starts to run (Below Fig). Choose FORMAT option pressing “PLAY” button.



5. SETUP

After installing a new hard drive on the system, **user** had better to format the hard drive first. There are three password levels in the system that including **Admin** (highest), **Operator**, and **Guest** (lowest). If



the user does not login the system, he can only view live video display and when the user login the system, if he don't operate the system in thirty seconds, the system will be locked automatically.



The system allows up to four user accounts. The administrator can set up the login name, password and level for each user. (Please refer to Section [5.6.2](#) for Account Setup.)

The **Admin** can operate everything, the **Operator** can operate everything except examining user accounts and modifying its password level and the **Guest** can operate live video display and image playback.

After system boot-up, hold a right mouse click button and there will be login window. Hold a left mouse click button to click the order of “Account”, and input correct account. Then left click the order of “Password” and input correct password. At last left click “Login” to enter system. There is one factory-preset login “account/password” “Admin/111111” at **Admin** level. The user can use it to login the system for the first time.

After system boot-up, hold a right mouse click button and there will be suggestive window options on the monitor (**Fig (a)**). Hold a left mouse click button to click the icon “”. Or press the MENU button to make any changes of DVR settings. You will see the screen below on the monitor (**Fig (b)**).



Fig (a)



Fig (b)

Suggestive window options:

-  Channel 1 view
-  Channel 2 view
-  Channel 3 view
-  Channel 4 view
-  All channel view
-  Manual recording or Stop manual recording
-  Play record list
-  PTZ Switch
-  Channel auto sequence. The icon “” won't display if the order of “auto sequence” is “OFF”.
-  Menu option
-  Logout

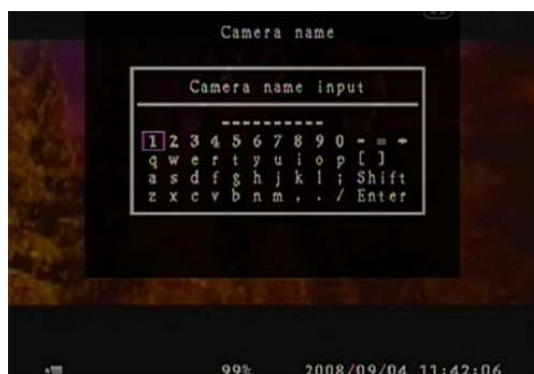
The DVR Front Panel or Remote Control

Press the “UP” or “DOWN” key on the DVR front panel or remote control to move the cursor. Press “SELECT” button on the front panel or remote control in order to change the settings. In the MAIN MENU, the cursor “►” will be shown on the screen right next to each sub menu. To go back to the previous, press “MENU” button on the front panel or remote control.

The Mouse Control

Move the mouse up or down to move the cursor. Hold a left mouse click button to change the settings. Click a right mouse to go back to the previous.

5.1 CAMERA



Use this option for video color adjustment for each channel (1,2,3,4). Go to DISPLAY option to enable or disable for screen display of each camera. Modify camera name of each channel that user wants to.

5.2 RECORD

Use this option to choose the channel (1,2,3,4) for recording. Only selected channel will be recorded no matter how many camera channels are displayed on the screen.



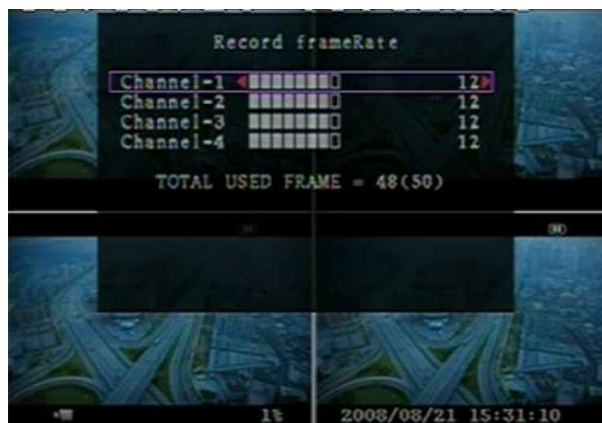
RECORD FRAMERATE

Change the record frame rate for each channel.

The higher the record frame rate, the more natural movement you will see while playback.

Independent each channel frame rate adjustment is possible.

Press button **【ENTER】** or hold a left mouse click button to click icon “►” to increase the record frame rate for each channel. Press button **【REC】** or hold a left mouse click button to click icon “◄” to decrease the record frame rate for each channel. If you make the record frame rate off, the channel won't record.



RECORD QUALITY

Choose record quality among Normal / Low / High. The higher the record quality is, the higher the video image quality is well you playback. Higher quality cost more hard disk space. Record frame rate, record quality and hard disk space will affect total record time of DVR system.

RECORD SCHEDULE

Notice: To start motion record, make sure the period that you intend to record is “” (green) in the “record schedule” menu. To start sensor record, make sure the period that you intend to record is “” (yellow) in the “record schedule” menu. To start motion & sensor record, make sure the period that you intend to record is “” (half green and half yellow) in the “record schedule” menu.



Press **「Up」** or **「Down」** or move the mouse to move the cursor and press **「SEL」** or hold a left mouse button to adjust video record method during each time period. Also user can adjust the same record method during the whole time periods synchronously, press **[QUAD]** button in the DVR front panel or remote control or hold a left mouse button to click the time period (24:00:00).

- **Grey bar:** No record will be made for this time period if user don't activate manual recording.
- **Red bar:** The time period with a red bar will activate continuous recording mode (Time record) unless there is any manual stopping during recording during that time.
- **Green bar:** The time period with a green bar for built-in motion recording (MD). (See also the following chapter “MOTION DETECTION”)
- **Yellow bar:** The time period with yellow bar will activate external sensor recording.
- **Half-yellow and half-green bar:** The time period with half-yellow and half-green bar will activate the combination of built-in motion (MD) recording and external sensor (Sensor) recording. (See also the following chapter “SENSOR”)

5.3 ALARM

Using SELECT button or hold a left mouse button to click icon
“◀” / “▶” adjust parameters of each option.

ALARM DURATION

It sets the alarm duration time (in seconds) after alarm is activated.

Value at “05, 10, 15, 20, 25, 30, CONT, OFF”(in seconds).

Default is “OFF”.

By changing the value in the ALARM DURATION, you can
adjust how long the alarm will last in seconds. The alarm device should be installed.

BUZZER DURATION

It sets the buzzer duration time (in seconds) after alarm is activated.

Value at “05, 10, 15, 20, 25, 30, CONT, OFF” (in seconds). Default is “OFF”. When “buzzer duration” is
“cont”, the buzzer will work continuously.

EVENT REC DURATION

It sets the record time of duration (in seconds) after sensor recording or motion recording or MD & sensor
recording is activated.

Value at “05, 10, 15, 20, 25, 30” (in seconds).

SENSOR

Activate / deactivate or choose the type of sensor. There are
three different modes for sensor setting: **N.C**
(NORMAL-CLOSE) & **N.O** (NORMAL-OPEN) & **NONE**.

Select “None” to deactivate sensor recording or if there was
no sensor installed in DVR system.

Chose the type of sensor (N.O or N.C) installed in DVR.

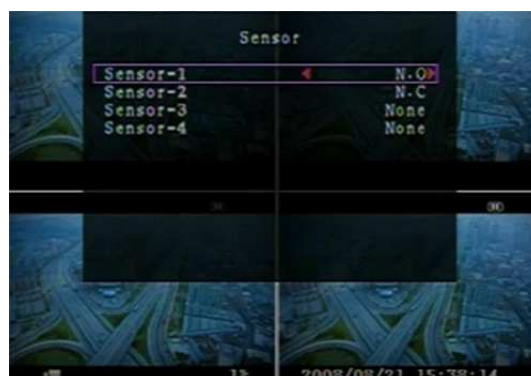
MOTION DETECTION

CHANNEL

Select the channel (1,2,3,4) for recording mode by internal
motion.

SENSITIVITY

It adjusts the sensitivity of the built-in motion sensor on the
DVR system while recording. The higher the number, the
higher the sensitivity is. Value at “1, 2, 3, 4, Off”. The
maximum sensitivity level is 4.



MOTION AREA

Use this option to select the range of motion detection area.

Use the keypad button, remote control button or mouse click to assign the area.

The keypad and mouse control instructions are below.

Using keypad or remote control button

Press [SEL] once to pitch on the area, press [SEL] twice to cancel the area.

QUAD: Select or deselect the motion detection area for motion detection recording.

CH1 - Up / CH2 - Down / CH3 - Left / CH4 - Right

Using Mouse button

While holding a left mouse click button, move the mouse to select, deselect or reselect the motion detection area for recording.

By the way, the area only can be selected from up to down and from left to right. When the block is covered by blue shadow it's active to record. When the block is transparent it can't be recorded.

After completed the motion area setting, press “MENU” button or hold a right mouse click button to exit.

To start Motion Record, user must complete the “Motion area” setup.

5.4 SCREEN

BORDER

User can make the white borderline around each channel to appear or disappear by using this option to be “on” or “off”.

AUTO SEQUENCE

This is for auto screen switch rotation.

Value at “Off, 1~10(in seconds)”. Default is “Off”.

VIDEO ADJUSTMENT

You can move the entire video screen up, down, left, and right using this option.

Keypad assignment in the front panel or remote control is below.

—CH1 for up, CH2 for down, CH3 for left, CH4 for right.

Mouse function:

Hold a right mouse click button, there will be some icons on the screen as follows “”. Hold a left mouse click button to click each icon to select.

—“▲”for up, “▼” for down, “◀” for left, “▶” for right, “” for ESC.



5.5 AUDIO

Make the record “ON” to enable sound recording when a microphone device is attached in AUDIO INPUT port on the system.

Adjust volume for speaker and the intensity level of sound recording. To make the sound enabled for speaker, leave the mute “OFF”.



5.6 SYSTEM



Fig (c)



Fig (d)

In this menu, you can see the information of the hard disk drive installed on the system, change the system password, adjust keypad tone, browser event list or adjust current time on the system.

If user login the system at **Admin** level, the menu bar will be displayed as **Fig (c)**. The user can enter into the order of “**Account**” to examine all user accounts, add or delete user that he wants to (Please refer to section [5.6.2](#) for account setup).

If user login the system at Operator or Guest level, the menu bar will be displayed as **Fig (d)**. The user can only modify its own password. (Please refer to [5.6.3](#) for password setup)

5.6.1 HARD DISK SETUP

OVERWRITE ENABLED

If you choose YES, recording continues and overwrites previous recording when hard disk drive space is full. If you choose NO, the recording stops when the hard disk drive is full.

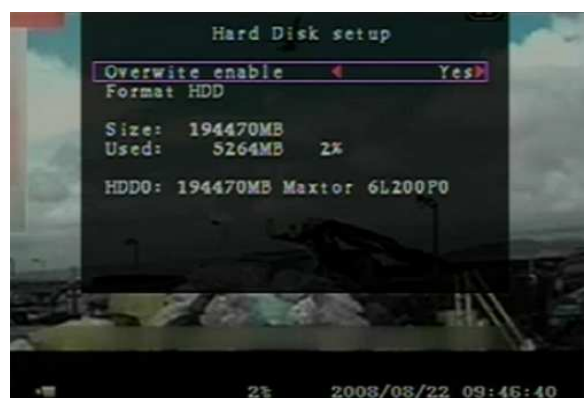
FORMAT HDD

If you format the hard disk drive, all the video data stored on the hard disk drive will be deleted!

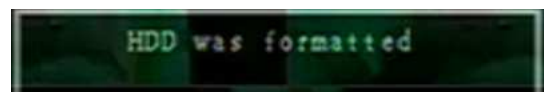
Remind that the system has no restore option once the hard drive is formatted.

When you choose this option, it will ask for password before formatting. The default password is "111111".

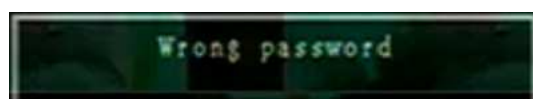
Type the password and press any key button.



When HDD is successfully formatted, you will see the message below blinking.



If the password is incorrect, you will see the below message blinking. Then try to type right password again.



5.6.2 ACCOUNT SETUP

Only if the user log in the system at Admin level, the Account Setup allows the administrator to add new users, delete existing ones and modify the user's name / password / level.

The system allows up to 4 user accounts.

[\[Account\]/\[Password\]](#)

In setup Menu display, move the cursor to change the highlighted option to Account and then press ENTER to call up Account/Password as shown. All numbers, letters and sign in the panel can be used as user account or password. Press 「SEL」 to input value and move the cursor to the option of “ENTER”, press 「SEL」 to confirm.

CH1 for up, CH2 for down, CH3 for left, CH4 for right, Press “Shift” for change characters.

[\[Level\]](#)

Move the cursor to change the highlighted option to Level and then press [SEL] to adjust user level (**Operator/Guest**).

5.6.3 PASSWORD SETUP

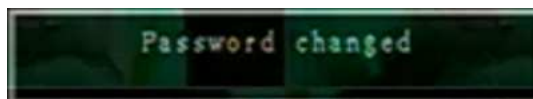
The default password is 111111. All numbers, letters and sign in the panel can be used as password. Press 「SEL」 to input value and move the cursor to the option of “ENTER”, press 「SEL」 to input current password.

CH1 for up, CH2 for down, CH3 for left, CH4 for right.

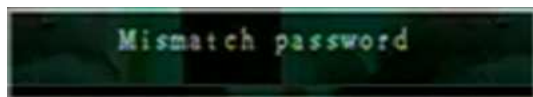
The same operation measure to input new password and confirm password.



When password change succeed, user will see the below message blowing.



When password change fail, user will see the below message blowing.



5.6.4 KEYPAD TONE

Make the keypad tone “ON” or “OFF” to enable or disable keypad tone during operating.

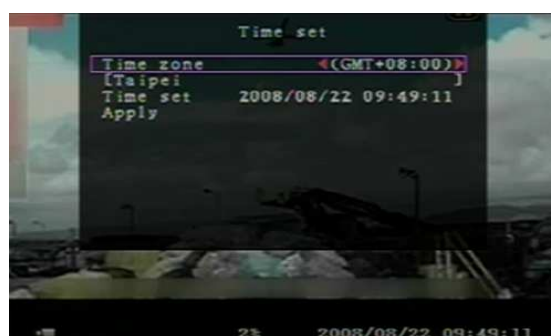
5.6.5 TIME SET

You can adjust the current time, date and year at any time by region. Set your region first and set the current time so that the video back-up data can be played without time shifting later on.

Date and Time format are below.

*** 2008/08/08 — year/month/day

*** 01:01:00 — hour: minute: second



To move the cursor on the screen, use “UP” and “DOWN” key on the DVR front panel or remote control and then press “SELECT” button to change the numeric value. Once you finish time setting, press “MENU” button. Then press “DOWN” key and “SELECT” button to apply the new time set or move the mouse to move the cursor up and down, hold a left mouse click button to change the numeric value. Once you finish time setting, hold a right mouse click button to return. Then move the mouse to the order of “Apply” to left click to apply the new time set.

5.6.6 EVENT LIST

EVENT LIST function enables playback by event.

On the Event List menu, it shows all past recorded video, start time and end time of each recorded video and showing recording year / date / time. The HDD can be store 300 pieces of event in it at most. If the events are over 300 pieces, user can play previous event according to input time period if the data hasn't been over-written.



To playback by EVENT LIST, using [UP]/[DOWN] or channel number (CH1 for Page Up or CH2 for Page Down) key on the front panel or remote control, select the event that you want to playback and press “PLAY” button. Another way is to move the mouse up and down or click the left mouse button (“◀” for Page Up or “▶” for Page Down), select the event that you want to playback and double click the left mouse button. Then it will playback the recording video data.

5.6.7 PTZ SETUP

Adjust the RS485 setting depending on the PTZ camera that you have.

Our DVR system supports PELCO-D protocol and PELCO-P protocol. Then we can see the diagram that is on the right. For example, we select the channel 1 to set up. Dome's address is 1. Protocol makes use of **PELCO-D**. Baud rate is 4800 and Dome's speed is 7.

CHANNEL: Select a camera channel where PTZ camera is connected.

ADDRESS: Dome's address “0-255” (**PELCO-D**) and “0-31” (**PELCO-P**).

PROTOCOL: Including “**PELCO-D**”, “**PELCO-P**”. Setting the protocol according to the dome's protocol.

BAUD RATE: Press “SEL” button to select the value **1200**, **2400**, **4800**, **9600**, **19200** bps.

SPEED: Having “1-10” to select.

PRESET: If protocol is **PELCO-D**, preset includes “1-31”. If protocol is **PELCO-P**, preset includes “1-255”.

When it displays **0**, it suggests that the place's preset is not using.



Button function On The Front Panel or Remote Control:

「Select」 : Make the setting.

「Up」 「Down」 : Move the cursor.

「SEL」 : Increase Value.

「REC」 : Reduce Value or Auto-scan.

「Ch1」 「Ch2」 : Move the dome upwards and downwards.

「Ch3」 「Ch4」 : Move the dome leftwards and rightwards.

「STOP」 : Stop the dome running.

「REW」 「FWD」 : Zoom.

「Pause」 「Play」 : Focus.

Mouse function:

Left Mouse: Click the icon “▶” or “◀” to adjust value.

Right Mouse: Previous.

Preset setup:

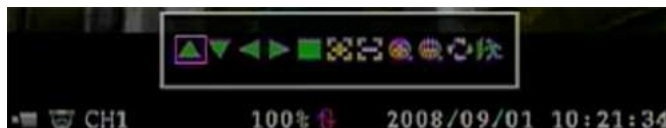
User must set preset at first. The address, protocol and baud rate of DVR is consistent with Dome's. You can make use buttons to control dome and save the preset.

If user wants to call preset, user can modify the value of preset to come true. Press 「Select」 button to finish the order of “call preset”.

User can perform auto scan when he saves the presets within cruise locus. Then he needs to press 「Select」 button to finish the order of “auto scan”, the dome will run all along unless user presses 「STOP」 button to stop it.

PTZ Mode:

Enter into PTZ mode and hold a right mouse click button, there will be a piece of message on the screen (right figure).

**Icon function:**

“▲▼▶◀”: Move the dome upwards/downwards\leftwards and rightwards.

“■”: Stop the dome running.

“⊞⊞”: Focus.

“+ -”: Zoom.

“⌛”: Auto scan.

“◀”: Previous.

Attention:

User can start-up automatic scout in “PTZ SETUP” menu or PTZ mode. It doesn't stop when user exits. If user wants to stop scouting, press 「STOP」 button in PTZ mode.

During live view, user can press 「PTZ」 button to enter PTZ mode and then user can operate to control the dome according to the method of above paragraphs.

5.6.8 FW UPGRADE

This menu is for firmware upgrade of DVR system through USB host (USB memory stick) connection, you can simply upgrade the system once you connect the USB memory stick that contains a firmware file.

- CAUTION:**
1. Do not turn off the system while the system is upgrading. Otherwise, it will cause the breakdown of the system that needs a special recovery process.
 2. If you don't install a HDD in the DVR, the system can't be upgrade.
 3. Before the system is upgrade, you must stop recording.

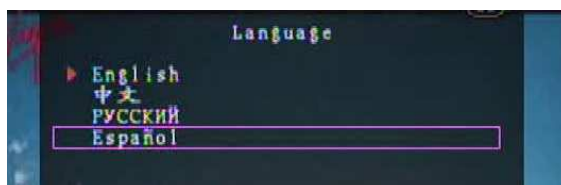
5.6.9 USB TEST

This option is testing purpose only. Users can check the compatibility of the USB memory stick for backup.



5.7 LANGUAGE

Our system supports multi-language OSD. On the menu of “Language”, you can move the cursor to change it by pushing “SELECT” button on the front panel or remote control and also can move the mouse to single left-click to select the language.



5.8 EXIT

After you change setting on DVR menu, you need to confirm the changes under EXIT menu.

EXIT & SAVE CHANGE

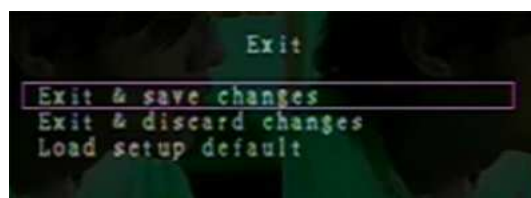
Save change and go back to main screen.

EXIT & DISCARD CHANGES

No change and go back to main screen.

LOAD SETUP DEFAULT

Load default setting.



6. PLAYBACK WITH TIME SEARCH FUNCTION

This is an enhanced playback option, which enables the user manually to adjust a specific starting time for playback.

Keypad Control:

In order to playback with time search function, press “PLAY” button on front panel or remote control first. Then press “SELECT” key to change the value of the playback start date & time and press “PLAY” button again. The playback will start from the date & time indicated by the user.



Mouse Control:

Hold a right mouse click button and left click the icon “▶”. Then press the left mouse button to change the value of the playback start date & time and press the right mouse button. Then hold a left mouse button to click “Search”, the playback will start from the date & time indicated by the user.

7. BACKUP via USB memory stick

Our 4-channel DVR system has an enhanced back-up features so that it's possible to transfer the video data image recorded on the hard drive to USB memory stick drive.

Before you back up a stream of video data, have the USB memory stick to be ready and attach them into DVR system.

In order to save the video data with these back-up devices, you should first start with playback and then press “MENU” button. Use “UP” key or “DOWN” key move the cursor, then press “SELECT” button to set start time and the end time of the recorded video data which will be saved on back-up devices. If you want to setup the end time faster, you can press the button [▶▶FWD] to change the play speed that you want and then press [DOWN] to select end time again. After setting the time of backup, you should press [PLAY] to recover the normal speed.

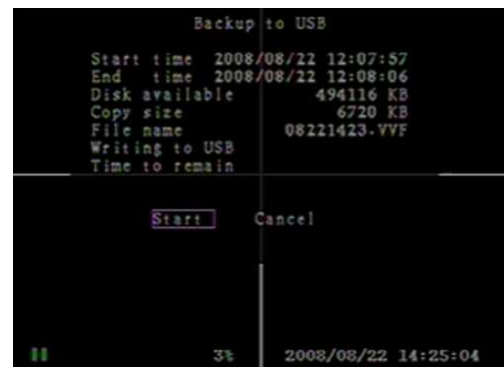
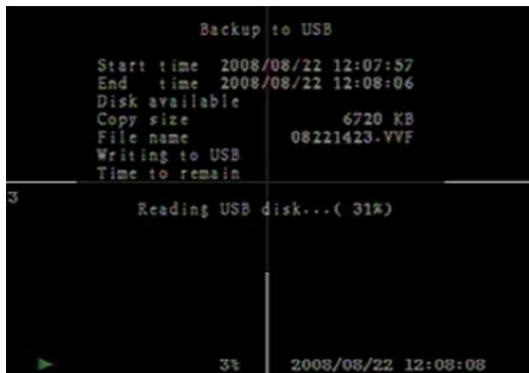
Move the cursor to the option “USB copy”, then press “SELECT” button to backup the video data on USB stick.

After playback, press “MENU” button. Then using “UP” and “DOWN” key set the time period of recorded video data that you want to save on the back-up devices.



USB copy:

Move the cursor to “USB copy” and press “SELECT” button or hold a left mouse click button to back up a stream of video data on USB memory stick.



It will take a few minutes to write the video data on USB memory stick. The file size number is going up until it's done with the message below.

WRITING...

Then it will show the following message on the screen.

FIXATING...

Take out the USB memory stick and attach it into your PC when it's done.

Press “PLAY” button to continue with a system.



8. RECORDING LENGTH

Video System is “PAL”. Estimate record time basing on 320G Byte HDD.

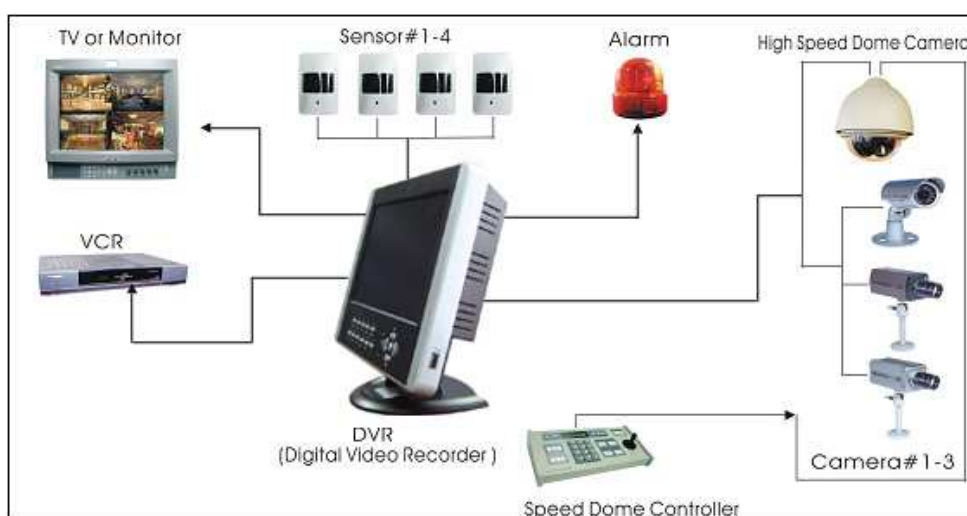
Record Speed	REC Quality	DATA RATE (GB/Hour)	Record Time (Hour)
50F/Sec	HIGH	4.4	73
	NORMAL	2.8	114
	LOW	2.3	139
25F/Sec	HIGH	2.4	133
	NORMAL	1.6	200
	LOW	1.3	246

9. SPECIFICATIONS

ITEM		DESCRIPTION		NOTE
Video Format		NTSC / PAL		
Operation System		None		STAND-ALONE
Camera Input Channel		4 channel Composite BNC		
Video Output Channel		1 channel Composite BNC		
Recording Frame Rate	NTSC	Max 60 fps (Total)		Max. 30 frames/s (Each Channel)
	PAL	Max.50 fps (Total)		Max. 25 frames/s (Each Channel)
Record Mode		Time schedule, Motion detection, Sensor activated, Motion detection & Sensor activated		
Resolution	Display	NTSC : 720 x 480 PAL : 720 x 576		
	Recording	NTSC : 320 x 112; 640 x 224 PAL : 320 x 136; 640 x 272		
Compression Method		Enhanced MJPEG (12-20K Bytes/frame)		Video Quality: Low @ 12K Bytes; Normal @ 15K Bytes; High @ 20K Bytes
HDD Support		Over 500G Byte	SATA or IDE ATA –100 Interface HDD×1	
Search	Method	Time, Event		
	Full Screen	YES		
Sensor, Alarm		4 Input (Normal Open / Normal Close) 1 Output (Alarm) (12 Pin DIP Switch) Camera Signal Loss Alarm 2 Pin for RS485 control Pan/Tilt/Zoom		
PTZ (RS485)		YES		PELCO-D, PELCO-P
Audio Input		2 Channels Composite RCA		
Audio Output		1 Channel Composite RCA		
USB		YES		USB 2.0 for media Backup
38KHZ Remote Control Unit		Optional		
PS/2 Mouse		Optional		
Power Input		100-240VAC/DC 12V , 3A (Adapter supplying)		
Dimension (L x W x H)		300 x 70 x 290 mm		

10. APPENDIX

10.1 System connect sketch map



10.2 Fitting come along with art. 80153

Power adapter, power cord, user manual (this manual), USB drive CD.

10.3 Compatible USB stick for art. 80153 (tested).

COMPANY	MODEL	SIZE
SONY	MICROVAULT (SOK-USM1GJ)	1GB
SAMSUNG	SUM-LCB1	1GB
TRANSCEND	JF V30	2GB
APACER	Weblink (SYE5003358)	2GB
SANDISK	CRUZER micro	4GB
FLEX	FD-02	1GB
KINGSTON	Data Traveler	2GB
KINGSTON	Data Traveler	1GB
LEMON	LEMON USB Drive	1GB